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Statistical Evaluation of Migration with Particular Reference to Jaipur

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Abstract
To study the basic characteristics of migration in Jaipur city. we have defined the various factors affecting migration in Jaipur city. Major object of our study is to find out the reason and impact of migration.In this paper with the help of graphs and pie charts we have tried to explain the main reason of migration in Jaipur city . To study the Distance graph between native place & current place using primary data. To test the independence between satisfaction level of migration and marital status of migrated persons and To test the independence between satisfaction level of migration and reason of migration using SPSS software.

Keywords: Statistics, Evaluation, Migration, Reference.

Introduction

Migration is the movement of people across a specified boundary for the purpose of establishing a new or semi-permanent residence.Migration from one area to another in search of important livelihood is a key feature of human history. The first attempt to spell out the 'laws of migration' was made by E.G. Ravenstein as early as in 1885. Using the birthplace data, numerous study shows that the process of migration is influenced by social, cultural and economic factors and outcome can be vastly different for men and women, for different groups and different regions.The migrants respond primarily to economic incentives. People move from poorer, area to wealthier area for improves their economic condition.

Causes of Migration

Push Factors are those that compel a person, due to different reasons, to leave that place or go to some other place. For instance, low productivity, unemployment and underdevelopment, poor economic conditions, lack of opportunities for advancement. Exhaustion of natural resources and natural calamities may compel people to leave the native place in search of better economic opportunities. The Pull Factors refer to those factors which attract the migrants to the area, such as, opportunities for better employment, higher wages, facilities better working conditions and amenities etc. There is generally city ward migration, when rapid growth of industry, commerce and business takes place, "migration from the country side to bears a close functional relation to the process of industrialization, technological advancement and other cultural changes which characterize the evaluation of modern society in almost all parts of world.

Objectives of the Study

1. To Study the main reason & impact of migration in Jaipur city.
2. To study the Distance graph between native place & current place and we tested the following Hypothesis:
3. To test the independency between satisfaction level of migration and marital status of migrated persons.
4. To test the independency between satisfaction level of migration and male female ratio.

Review of Literature

Migration is a very complex phenomenon. Apart from a set of social, economic, political and environmental factors, migration of population in any region is determined, to large extent, by the perception and behaviour of individuals concerned. Therefore, there is no comprehensive theory of migration, although attempts have been made, from time to time, to integrate migration into economic and social theory, spatial analysis and behavioural theory (Johnston et al, 1981:218). Using the birthplace data, RAVENSTEIN identified a set of generalizations, which he called as 'laws of migration' concerning inter-county migration in Britain in the nineteenth century. Everett Lee proposed another comprehensive

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theory of migration in 1966. He begins his formulations with factors, which lead to spatial mobility of population in any area. According to Lee, each place possesses a set of positive and negative factors. While positive factors are the circumstances that act to hold people within it, or attract people from other areas, negative factors tend to repel them (Lee, 1975:191).

Data collection technique

We collected primary information through questionnaire filled by the respondent's it-self. We prepare questionnaire in which we include 18 questions for collecting the information from the migrated persons in different areas in Jaipur city. The selection of area for collecting data based on migration we use following sampling design. We use multistage sampling for collecting the data based on migration. In this survey our universe is Jaipur city. So by applying sampling technique select a sample which is fulfill our object of the survey. First of all we find the total wards in Jaipur. Total number of wards in Jaipur city is 77. Now, at the first stage we use purposive sampling and classified our population in two groups, first group in which zero migration or negligible migration and second group we select those areas from the population which fulfill our object of migration. By the prior information we get 39 wards in first group in which zero and negligible migration and 38 wards in second group. Now, keeping in view the object of the survey we select second group because this group fulfill our object of the survey. Now, at the second stage we apply simple random sampling without replacement for selecting 4 wards out of 38 wards. For selection of 4 wards we use Lottery method and we get following wards- Ward area: Sanganer,Maliviya nagar,Murlipura,Bapu nagar. Now, at third stage we use acceptance sampling and we decide same day and same time for doing survey. We collect data of size 135 from each area. Thus, we get a sample of size 540.
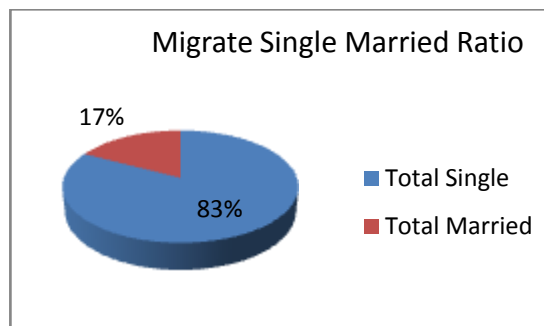
**Graphical Representation of Data**

1 Male Female Ratio:

Migrate Male Female Ratio

Total Male	Total Female
322	210
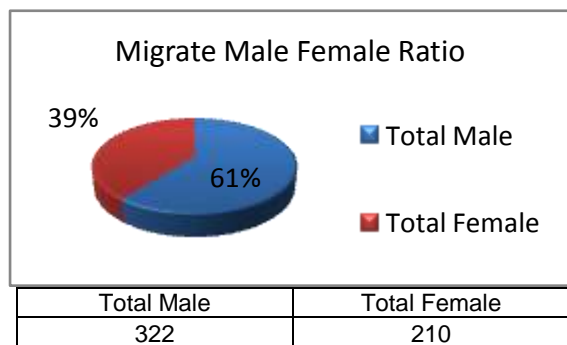
Single Married Ratio:

Total Single	Total Married
422	118

Migrate Single Married Ratio

Graph between Native Place and Current Place

Distance group	No of persons
Below 100	90
100-200	203
200-300	110
300-400	75
400 above	62
Total	540

Graph Between native place and current place
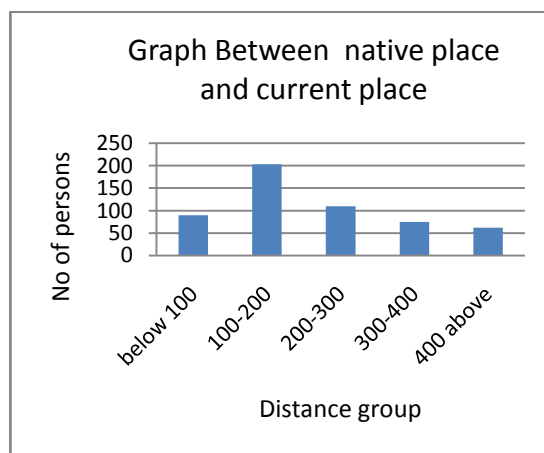
Statistical Analysis of Data:

Statistical test for association of migration satisfaction with different demographic Variables (X^2_{-test}) Chi-square is a exact sampling distribution. To test, two attributes are independent or dependent to each other we use chi-square test. This is one of the very important applications of chi-square distribution. To apply this test, first we arranged frequencies in a contingency table.

Test statistic is : $X^2 = \sum \frac{(O_i - E_i)^2}{E_i}$

Where, O_i is observed frequency; E_i is expected frequency.

1. To test the independence between satisfaction level of migration and marital status of migrated persons

Null Hypothesis H_O

The satisfaction level of migration are independent to marital status of migrated person. Vs

Alternative Hypothesis, H_1

The satisfaction level of migration are dependent to marital status of migrated person.

Now, from our data we get a 2*2 contingency table as follow:

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Marital Status	Satisfied	Not Satisfied	Total
Single	310	82	392
Married	50	38	88
Total	360	120	480

By apply the SPSS Statistics, we get the following results:

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Marital Status * Satisfaction level for migration	480	100.0%	0	0.0%	480	100.0%

MARITAL STATUS * Satisfaction Level for Migration Cross Tabulation					
			Satisfaction Level for Migration		Total
			0	1	
Marital Status	0	Count	82	310	392
		Expected Count	98.0	294.0	392.0
	1	Count	38	50	88
		Expected Count	22.0	66.0	88.0
Total		Count	120	360	480
		Expected Count	120.0	360.0	480.0

Chi-Square Tests					
	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	18.998[a]	1	.000		

2. To test the independence between satisfaction level of migration and reason of migration.

Null hypothesis, H_O

The satisfaction level of migration are independent to reason of migration.

Alternative Hypothesis, H_1

The satisfaction level of migration are dependent to reason of migration.

Now, from our data we get a 3*2 contingency table as follow:

Reason	Satisfied	Not satisfied	Total
Study	235	77	312
Study & job	88	8	96
Service	37	35	72
Total	360	120	480

By apply the SPSS Statistics, we get the following results

Case Processing Summary						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
REASON * Satisfaction level for migration	480	100.0%	0	0.0%	480	100.0%

REASON * Satisfaction Level For Migration Cross Tabulation					
			Satisfaction Level For Migration		Total
			0	1	
Reason	0	Count	77	235	312
		Expected Count	78.0	234.0	312.0
	1	Count	8	88	96
		Expected Count	24.0	72.0	96.0
	2	Count	35	37	72
		Expected Count	18.0	54.0	72.0
Total		Count	120	360	480
		Expected Count	120.0	360.0	480.0

Chi-Square Tests			
	Value	df	Asymp.Sig.(2-sided)
Pearson Chi-Square	35.647[a]	2	.000

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Conclusion

From the above graphical representation we have the following conclusion about data:

1. According to data we conclude that number of migrate male persons are greater than number of migrate female persons in Jaipur city.
2. According to data we conclude that numbers of single migrated persons are greater than number of married migrate persons in Jaipur city.
3. According to chart we conclude that maximum number of migrated persons are belonging to 100 to 200 km from their native place.
4. According to our survey we conclude that Satisfaction level dependent to marital status of migrated persons. Which show that marital status of migrated person effect the satisfaction level of migrated person at any level.
5. Reasons of migration i.e. study, service and study & job effect Satisfaction level of migration. So we can say that the reason for which the persons comes in Jaipur also effect the satisfaction level of migrated person.

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